## Green Ridge Utilities, Inc. - Vista System I.D. 0120014 2008 Water Quality Report

We are pleased to provide you with the 2008 Water Quality Report. This report is designed to inform you of the quality of water we delivered to you over the past year. Our goal is to provide you a safe and dependable supply of drinking water. Our wells draw from the James Run Gneiss aquifer in Harford County. An aquifer is a geological formation that contains water.

We are pleased to report that our drinking water meets all federal and state requirements.

Green Ridge Utilities, Inc.-Vista routinely monitors for components in your drinking water according to Federal and State laws. This report covers the period of January 1 to December 31, 2008.

Source Water Assessment, The Maryland Department of the Environment's Water Supply Program (WSP) has conducted an assessment of the vulnerability of the Lakeside Vista ground water sources for contamination. The required components of this report as described in Maryland's Source Water Assessment Plan (SWAP) are: 1) delineation of an area that contributes water to the source, 2) identification of potential sources of contamination, and 3) determination of the susceptibility of the water supply to contamination. Recommendations for protecting the drinking water supply conclude this report.

The sources of Lakeside Vista water supply draw water from an unconfined fractured rock aquifer known as James Run Gneiss Formation. Unconfined aquifers are generally vulnerable to any activity on the land surface that occurs within the wellhead protection area (WHPA). The system currently uses two production wells and one standby well to obtain their drinking water. The WPHA was delineated using U.S. EPA approved methods specifically designed for each source.

Potential sources of contamination within the assessment area were identified based on site visits, database reviews and land use maps. Well information and water quality data were also reviewed. Figures showing land uses and potential contaminant sources within the Wellhead Protection Area and aerial photograph of the well locations are available for review.

The susceptibility analysis for the Lakeside Vista water supply is based on a review of the water quality data, potential sources of contamination, aquifer characteristics and well integrity. It was determined that the Lakeside Vista wells are susceptible to contamination by nitrate. Should the EPA adopt a drinking water standard for radon-222, the Lakeside Vista wells may also be susceptible to this naturally occurring contaminant. The Lakeside Vista water supply was determined not to be susceptible to volatile organic compounds, synthetic organic compounds, microbiological pathogens, and other regulated inorganic compounds and radionuclides.

Green Ridge Utilities, Inc. Vista does not hold regular meetings. If you have any questions about this report or your water utility or would like a copy of the source water assessment, please contact customer service at (800) 860-4512. We want our customers to be informed about their water utility.

<u>Definitions</u>: In these tables you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

- Standard units (S.U.) standard units is a measurement of that particular regulated contaminant.
- Not-Applicable (N/A) Information not applicable/not required for that particular water system or for that particular Rule.
- Parts per million (ppm) or milligrams per liter (mg/l) one part per million corresponds to one minute in two years or a single penny in \$10,000.
- Parts per billion (ppb) or Micrograms per liter (ug/l) one part per billion corresponds to one minute in 2,000 years, or arsingle penny in \$10,000,000.
- Action level (AL) action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Maximum contaminant level (MCL) The maximum contaminant level is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
- Maximum contaminant level goal (MCLG) The "goal" is the level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.
- Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

• Maximum Residual Disinfectant Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contamination.

Based on certain criteria, some systems may be allowed to monitor for regulated contaminants less often than once a year. In this case, the table will include the date and results of the most recent sampling.

Nitrate/Nitrite Contaminants

Contaminant (units)	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Nitrate (as Nitrogen) (ppm)	No	6.4	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

**Inorganics Contaminants** 

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Chromium (ppb)	Mar 07	No	1.7	N/A	100	100	Discharge from steel and pulp mills; erosion of natural deposits

**Radiological Contaminants** 

autological Contaminants								
Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination		
Radium 226 (pCi/l)	Sep 07	No	0.3	0	5	Erosion of natural deposits		
Combined radium (pCi/l)	Sep 07	No	0.3	0	5	Erosion of natural deposits		
Alpha emitters (pCi/l)	Sep 07	No	3	0	15	Erosion of natural deposits		
Beta/photon emitters (pCi/l)	Sep 07	No	4	0	50	Decay of natural and man-made deposits		

Synthetic Organic Chemical Contaminants including pesticides and herbicides

~	Juniorie Organie One	IIII COI	I COURTERING I	Hermanne	pesticiaes and	Her breide	25	
	Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
	Di(2-ethylhexyl) phthalate (ppb)	Sep 07	No	0.9	N/A	0	6	Discharge from rubber and chemical factories

**Unregulated VOC Contaminants** 

Contaminant (units)	Sample	Your	Range
	Date	Water	Low High
Dibromochloromethane (ppb)	Sep 04	0.5	N/A

**Lead and Copper Contaminants** 

Contaminant (units)	Sample Date	Your Water	# of sites found above the AL	MCLG	MCL	Likely Source of Contamination
Copper (ppm) (90 <sup>th</sup> percentile)	Dec 06	0.28	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Disinfectant & Disinfection By-Product Contaminants

Contaminant (units)	MCL/MRDL Violation Y/N	Your Water (AVG)	Range Low High	MCLG	MCL	Likely Source of Contamination
Chlorine (ppm)	No	1.2	0.8 – 1.5	MRDLG = 4	MRDL =	Water additive used to control microbes

Secondary Contaminants are substances that affect the taste, odor, and/or color of drinking water. These aesthetic contaminants normally do not have any health effects and normally do not affect the safety of your water.

## **Water Characteristics Contaminants**

Contaminant (units)	Sample Date	Your Water	Range Low/High	Secondary MCL
Iron (ppm)	Daily 2008	0.03	0.02 - 0.04	0.3
Sodium (ppm)	Sep 2007	83	N/A	N/A
pH (s.u.)	Daily 2000	7.0	6.8 – 7.3	6.5 to 8.5

Our system received monitoring waivers for: cyanide, nitrite, asbestos, combined uranium and radium 226.

## Nitrate

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the United States Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Green Ridge Utilities, Inc. Vista is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.



We ask that all our customers help us protect our water sources which are the heart of our community, our way of life and our children's future.

## **2008 Violation Summary Table:** Violation Description

Start

End

No drinking water quality violations were recorded during 2008.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alquien que lo entienda bien.